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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/921,851	08/03/2001	Gary K. Michelson	101.0084-02000	8299
22882	7590	02/16/2006		
MARTIN & FERRARO, LLP 1557 LAKE O'PINES STREET, NE HARTVILLE, OH 44632			EXAMINER SNOW, BRUCE EDWARD	
			ART UNIT 3738	PAPER NUMBER

DATE MAILED: 02/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 09/921,851	<b>Applicant(s)</b> MICHELSON, GARY K.	
	<b>Examiner</b> Bruce E. Snow	<b>Art Unit</b> 3738	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2005.  
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 126-130, 207-210, 213-225, 227 and 229-262 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☒ Claim(s) 126-130, 207-210, 213-220 and 236-257 is/are allowed.  
 6) ☒ Claim(s) 221-225, 227, 229-235 and 258-262 is/are rejected.  
 7) ☒ Claim(s) 235 is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☐ All b) ☐ Some \* c) ☐ None of:  
 1. ☐ Certified copies of the priority documents have been received.  
 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/19/05</u> | 6) <input checked="" type="checkbox"/> Other: <u>ATTACHMENT 1</u>                       |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's amendments and arguments filed 12/19/05 have been fully considered. Applicant's terminal disclaimer overcame the double patenting rejection over all claims of application No. 10/808,852 which has issued.

The previous rejection under 35 U.S.C. 103(a) as being unpatentable over Aebi et al (6,482,233) has been withdrawn and new rejections in view of Aebi et al have been made. Applicant's arguments are believed to be adequately addressed in the new grounds of rejection.

### ***Allowable Subject Matter***

Claims 126-130, 207-220, and 236-257 are allowed.

Claim 235 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application

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by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 221-225, 227, 229-235, 258-262 are rejected under 35 U.S.C. 102(e) as anticipated by Aebi et al (6,482,233) or, in the alternative, under 35 U.S.C. 103(a) as obvious over Aebi et al (6,482,233) in view of Fraser (6,432,106).

Aebi et al teaches a spinal implant comprising bone engaging structures 28 that are generally pyramid-shaped, as shown in figures 1 and 3, formed on the upper and lower surfaces of the implant. The engaging structures are slanted towards the trailing end 14 and, therefore, have a forward facing facet (towards leading end 12) that is longer than a rearward facing facet; and having converging triangle-shaped side facets.

*(Note that Aebi et al and applicant teach the bone engaging structures slant in a direction such to allow ease of insertion and to avoid retropulsion. See Aebi et al column 4, lines 30-34 and applicant's specification page 5, lines 5-9 and lines 15-19.)*

Aebi et al teaches the posterior facet can range from about 0 degrees to about 30 degrees; see 4:40-41. With an angle of about zero degrees the following is true, *"said rearward facet terminating at a first location proximate the base, said rearward facet terminating at a second location proximate said forward facing facet, the first location being closer to the leading end of the implant than the second location"*. See attachment 1 for a drawing of the Examiner's interpretation. This must be true because the second location to the leading end is the hypotenuse of the triangle formed.

Additionally, the arrows used of Aebi et al in Figure 6 to describe the angle B are not limiting the angle to equal to or greater than 0, but instead, are merely the normal way of indicating the measured angle.

**In the alternative (103):**

Aebi et al does not positively teach *"said rearward facet terminating at a first location proximate the base, said rearward facet terminating at a second location proximate said forward facing facet, the first location being closer to the leading end of the implant than the second location"*.

Fraser teaches a similar spinal implant having surface projections 50 wherein the rearward facet 72 can either have a positive slope ( $\alpha_2$ ) or negative slope ( $\alpha_1$ ) as shown in figure 10. It would have been obvious to one having ordinary skill in the art to

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have formed the rearward facet of Aebi al forming a negative slope as taught by Fraser such that the projections dig into the bone and better resists expulsion.

Many of applicant's dependent claims claim a wide range of limitations, for example, forming steps such as grinding, milling, etc. which lack criticality in the specification, the use of any limitations in lieu of those used in the references solves no stated problem and produces no benefits and would have been an obvious matter of design choice for someone skilled in the art. Additionally, these limitations are well known in the prosthetic art and would have been obvious to one having ordinary skill.

Regarding claims 231 and 233, see 4:10 et seq. of Aebi et al.

Regarding new claim 262, note that Fraser teaches spinal implant that comprises a plurality of holes. It would have been obvious to one having ordinary skill in the art to use the combination projections on the implant of Fraser.

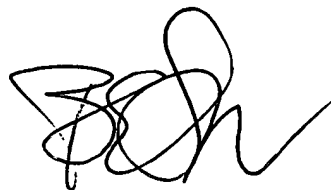
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bruce E. Snow whose telephone number is (571) 272-4759. The examiner can normally be reached on Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott can be reached on (571) 272-4754. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

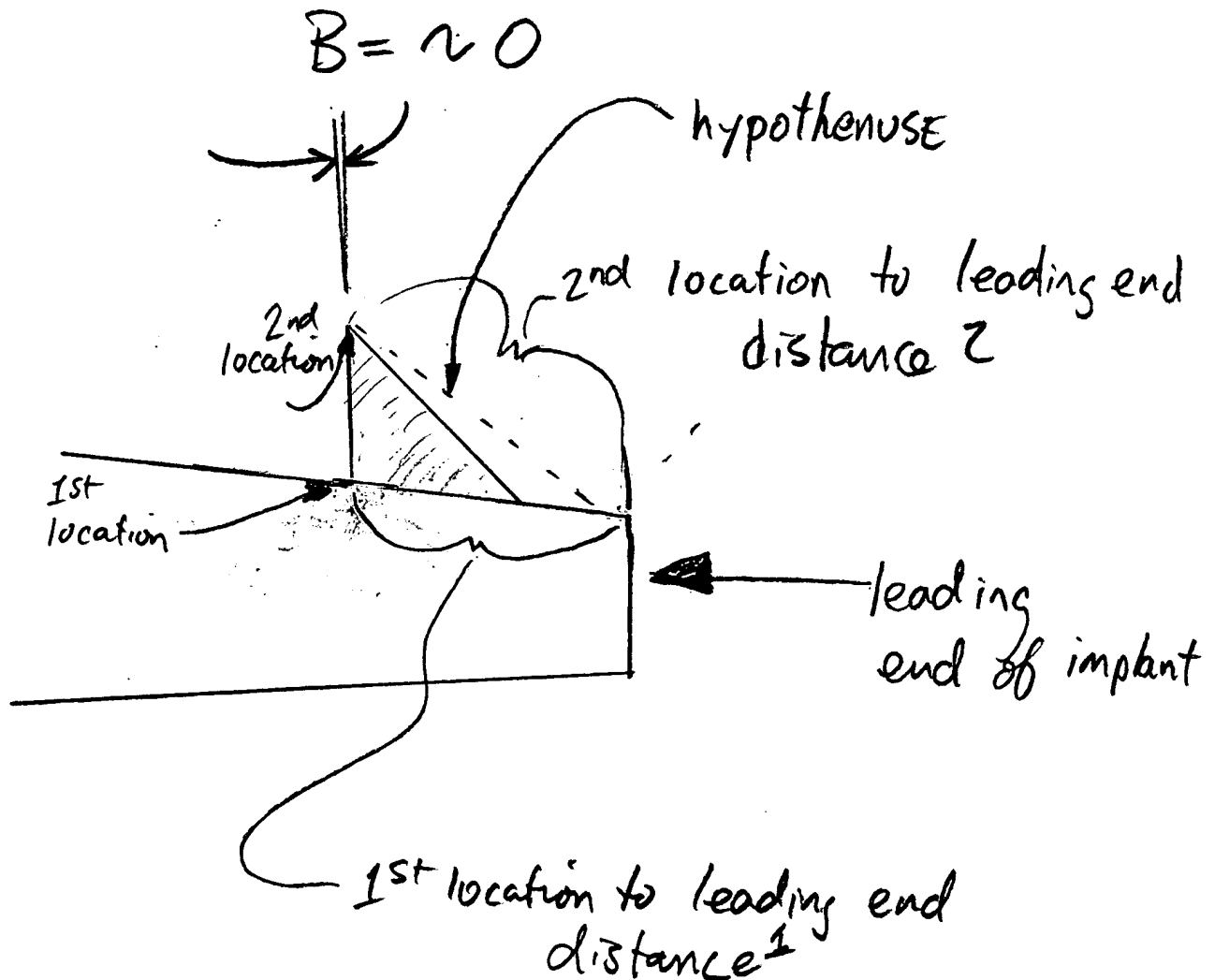
bes

A handwritten signature in black ink, appearing to read 'BSN', with a stylized flourish extending to the right.

**BRUCE SNOW**  
**PRIMARY EXAMINER**

09/921,851

# ATTACHMENT 1



$\therefore$  1st location is closer to leading end